CURRICULUM VITAE

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Education

◇ **Harvard University**, Cambridge, MA, USA.
PhD in Physics (June 2006). Advisor: Professor Nima Arkani-Hamed.
Thesis title: *"Beyond the Standard Model: the Pragmatic Approach to the Gauge Hierarchy Problem."*

◇ **University of Bristol**, Bristol, England.
Masters [MSci] in Physics - 1^{st} class (Honours) (June 2000).

Academic Positions

◇ **Research Assistant**, Fermilab (Oct 2006 - Present), specializing in Beyond the Standard Model model building and collider phenomenology.

◇ **Yearly Teaching Fellowships**, Harvard University, Dept. of Physics. (2000 - 2006)

· Quantum Field Theory (postgraduate class), Mechanics, Advanced Mechanics, Electricity and Magnetism (theory and lab) and Quantum Mechanics (undergraduate classes). Part-time appointment that involved leading weekly tutorial groups to teach problem solving skills and acting as a liaison between the lecturer and the students. Also included marking problem sheets and exams.

· Three-time winner of the Physics department's White Prize for Excellence in Teaching (based on student feedback).

◇ **Teaching Consultant**, Bok Center for Teaching, Harvard University (2004 - 2006).
Worked closely with other teaching fellows with the aim of improving the overall standard of teaching at the university. Duties included viewing videotaped classes with new teachers and discussing techniques to facilitate teacher-student communication.

Conference Talks

◇ **Beyond the Standard Model at the Dawn of the LHC Era** (June 2007) Eotvos University, Budapest, Hungary.
"The 6D Standard Model: A Tale of Spinless Adjoints".

◇ **SUSY 2005** Durham, England.
"The Minimal Model for Dark Matter and Unification".

◇ **SUSY 2004** Tsukuba, Japan.
"The New Fat Higgs".

Seminars

- ◇ **Theory Seminar** (November 2008) ETH, Zurich, Switzerland.
  "A Simple, Stabilized Model of Brane Inflation".
- ◇ **Particle Theory Seminar** (November 2008) IPPP, Durham, UK.
  "A Simple, Stabilized Model of Brane Inflation".
- ◇ **CDF Exotics Group Meeting** (December 2007) Fermilab, Batavia IL.
  "Searching for Color-Octet Vector Bosons in Multi-jet Final States".
- ◇ **CDF Exotics Group Meeting** (December 2007) Fermilab, Batavia IL.
  "Cascade Decays with Lepton and Photon Final States from the 6D Standard Model"
- ◇ **Theory Seminar** (May 2007) University of Illinois, Chicago IL.
  "The 6D Standard Model: A Tale of Spinless Adjoints".
- ◇ **High Energy Physics Seminar** (February 2007) Michigan State University, East Lansing MI.
  "The 6D Standard Model: A Tale of Spinless Adjoints".
- ◇ **Theory Seminar** (January 2007) Fermilab, Batavia IL.
  "Probing New Physics in Final States with Top Pairs and Missing Energy".
- ◇ **Particle Theory Seminar** (October 2005) Cornell University, Ithaca NY.
  "The Minimal Model for Dark Matter and Unification".
- ◇ **Theory Seminar** (October 2005) SLAC, Menlo Park CA.
  "The Minimal Model for Dark Matter and Unification".
- ◇ **High Energy Seminar** (October 2005) UC Davis, Davis CA.
  "The Minimal Model for Dark Matter and Unification".
- ◇ **Particle Family Seminar** (June 2004) Harvard University, Cambridge MA.
  "The New Fat Higgs: Slimmer and More Attractive".

Publications

- ◇ **"Top Quark Pair plus Large Missing Energy at the LHC"**, T. Han, R. Mahbubani, D. G. E. Walker and L. T. E. Wang, arXiv:0803.3820 [hep-ph].
- ◇ **B. A. Dobrescu, K. Kong and R. Mahbubani**, *"Massive Color-Octet Bosons and Pairs of Resonances at Hadron Colliders"* arXiv:0709.2378 [hep-ph]. To be published in Physics Letters.
- ◇ **"Spinless Photon Dark Matter from Two Universal Extra Dimensions"**, B. A. Dobrescu, D. Hooper, K. Kong and R. Mahbubani , JCAP **0710**, 012 (2007), [arXiv:0706.3409 [hep-ph]].
- ◇ **"Leptons and Photons at the LHC: Cascades through Spinless Adjoints"**, B. A. Dobrescu, K. Kong and R. Mahbubani, JHEP **0707**, 006 (2007), [arXiv:hep-ph/0703231].
- ◇ **"The Minimal Model for Dark Matter and Unification"**, R. Mahbubani, L. Senatore , [arXiv:hep-ph/0510064]
- ◇ **"The New Fat Higgs: Slimmer and More Attractive"**, S. Chang, C. Kilic and R. Mahbubani, SUSY 2004 conference proceedings.
- ◇ **"Bounds on the Higgs Mass in Variations of Split Supersymmetry"**, R. Mahbubani, [arXiv:hep-ph/0408096].
- ◇ **"The New Fat Higgs: Slimmer and More Attractive"**, S. Chang, C. Kilic and R. Mahbubani, Phys. Rev. D **71**, 015003 (2005), [arXiv:hep-ph/0405267].
- ◇ **"Precision Electroweak Observables in the Minimal Moose Little Higgs Model"**, C. Kilic and R. Mahbubani, JHEP **0407**, 013 (2004), [arXiv:hep-ph/0312053].